

# OPTICAL DISC DRIVE WHICH CAN DETECT AND CORRECT BI-PHASE DATA ERRORS

## Abstract

An optical disc drive includes an optical pickup for reading an RF datum in an optical disc, an FM demodulator for demodulating the RF datum so as to generate a bi-phase datum, a bi-phase data rule checker for checking if phases at each edge of neighboring bit cells are different, a bi-phase data corrector for generating a plurality of bi-phase data when the bi-phase data rule checker detects that at least one pair of phases at the edges of neighboring bit cells are not different, a bi-phase demodulator for demodulating the plurality of bi-phase data so as to generate a plurality of ATIP signals, a CRC checker for testing the plurality of ATIP signals, and a multiplexer for selecting a correct ATIP signal according to a test result of the CRC checker.